



# Safety Performance Measures Resources and Support

The Safety Performance Management Measures regulation requires State Departments of Transportation (DOTs) and metropolitan planning organizations (MPOs) to establish targets for five safety performance measures to support the Highway Safety Improvement Program (HSIP). As State DOTs, MPOs, and other safety stakeholders begin to coordinate and collaborate to establish CY 2018 HSIP targets, Federal Highway Administration (FHWA) offers many training opportunities, tools, and capacity building resources.

## TRAINING

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### Safety Target Setting Coordination and Training Workshops

FHWA, in coordination with National Highway Traffic Safety Administration (NHTSA), will offer one day State Safety Target Setting Coordination and Training Workshops to States at no cost beginning in November 2016. The workshops will bring State DOTs, State Highway Safety Offices (SHSOs), and MPOs in the State together to discuss safety performance requirements and assist States in reviewing their data for the first round of safety target setting. FHWA will work with State DOTs to coordinate with MPOs, SHSOs, and others to identify an appropriate date for the one day workshop.

### Webinars Related to the Safety Performance Measures Final Rule

The Office of Transportation Performance Management and the Office of Safety will host a webinar on “Let’s Talk Performance, Target Setting Coordination and Methodologies for Setting Targets” on September 20.

The Office of Safety, NHTSA, and the Federal Motor Carrier Safety Administration (FMCSA) will host a webinar in November to explain the Safety Performance Measures Final Rule requirement for a single national definition for suspected serious injury.

Archived webinars are available for review at: <http://safety.fhwa.dot.gov/hsip/spm/>.

### Performance Management Training Courses

**FHWA, through the National Highway Institute (NHI), offers a variety of courses related to performance management. These courses are fee based and include:**

- **NHI-138006 Transportation Performance Management for Safety** walks participants through various provisions of the Safety Performance Measures Final Rule and provides options for setting evidence based targets.
- **NHI-138012 Steps to Effective Target Setting and Progress Assessment** will assist States and MPOs with setting targets throughout all transportation programs. The course helps State DOTs and MPOs understand how to implement performance management principles by teaching how to develop and set performance targets.
- **NHI-138011 The Role of Data in Transportation Performance Management** will describe transportation performance management data analysis needs, integrate scenario based projections of performance with trend data for performance target setting and reporting and identify common data quality issues and techniques for addressing them.

**The following courses also support transportation performance management and are either available or currently under development:**

- NHI-138004 Overview of MAP-21 (101) Transportation Performance Management
- NHI-138005 Overview of MAP-21 (101) Transportation Performance Management
- NHI-138007 Performance-Based Planning and Programming
- NHI-138008 Transportation Performance Management for Bridges
- NHI-138009 Transportation Performance Management for Pavement
- NHI-138010 Transportation Performance Management for Congestion (including Freight)

## FHWA Capacity Building Programs

**FHWA administers several Capacity Building Programs:**

- The Office of Safety offers partners a Peer to Peer-Technical Assistance Program designed to help develop, implement, or evaluate effective strategies and programs. As part of this program, a Peer Exchange can be tailored to the Safety PM Final Rule and assist States and MPOs with implementing the regulations. The forum for this technical assistance program could be web conference or onsite (<https://rspcb.safety.fhwa.dot.gov/>).
- The Office of Transportation Performance Management (TPM) Professional Capacity Building Program (PCB) ensures that federal, State departments of transportation (SDOT), MPOs, transit, and local partners are prepared to carry out performance-based transportation decision-making through an organizational assessment using the corporate maturity model (CMM). The TPM Office is accepting applications for TPM State Workshops and TPM Peer-to-Peer (P2P) assistance activities (<http://www.fhwa.dot.gov/tpm/tpmrequest>). You can also use the application to express interest in participating in other various TPM professional capacity building activities as they are made available.
- The Office of Planning (<https://planning.dot.gov/>) offers a Peer to Peer-Technical Assistance Program as part of its Transportation Planning Capacity Building program that could assist States and MPOs in coordinating, establishing, and reporting on targets.

## Safety Data and Analysis Tools Courses

**The NHI catalog offers a host of training courses related to advanced analysis tools:**

- NHI-380070 Highway Safety Manual Practitioners Guide for Geometric Design Features
- NHI-380070A Highway Safety Manual Practitioners Guide for Two-Lane Rural Highways
- NHI-380070B Highway Safety Manual Practitioners Guide for Multilane Highways
- NHI-380071 Interactive Highway Safety Design Model
- NHI-380093 Application of Crash Modification Factors (CMF)
- NHI-380094 Science of Crash Modification Factors
- NHI-380100 Using IHSDM
- NHI-380105 Highway Safety Manual Practitioners Guide for Intersections
- NHI-380106 Highway Safety Manual Online Overview
- NHI-380110 Highway Safety Improvement Program Overview - WEB BASED
- NHI-380111 Highway Safety Improvement Program (HSIP) Project Identification
- NHI-380112 Highway Safety Improvement Program (HSIP) Project Evaluation
- NHI-380113 Strategic Highway Safety Plan Development
- NHI-380114 Strategic Highway Safety Plan Implementation



## RESOURCES

### Resources for Safety Performance Management

The Office of Safety has a website dedicated to Safety Performance Management. A tool box of resources on noteworthy practices, guidance documents, fact sheets, and presentations can be found at <http://safety.fhwa.dot.gov/hsip/spm/>.

#### A sampling of materials available on the website include:

- Safety Target Setting Final Report
- A Compendium of State and Regional Safety Target Setting Practices
- Safety Target Setting Peer Exchange
- Target Setting Literature Review
- Urbanized and Non-urbanized Safety Target Setting: Final Report
- Safety Performance Measures Fact Sheet
- Met or Made Significant Progress Fact Sheet
- Target Setting Coordination Workshops Final Report -coming soon
- Metropolitan Planning Organization Fact Sheet-coming soon
- Safety Performance Measures Timeline Fact Sheet-coming soon
- State Serious Injury Conversation Tables-coming soon



### Other Resources Related to Performance Management Training

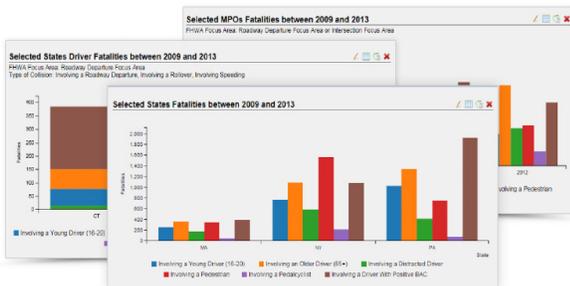
The Rhode Island DOT is leading a pooled-fund study (<http://www.pooledfund.org/Details/Study/575>), administered by AASHTO and supported by FHWA, to support TPMP training and capacity building needs for States, MPOs, and public transportation providers.

The following two Resource Centers work closely with FHWA Headquarters, field offices, and other Federal agencies to provide technical assistance, technology deployment, and training to partners and customers in the field of transportation safety.

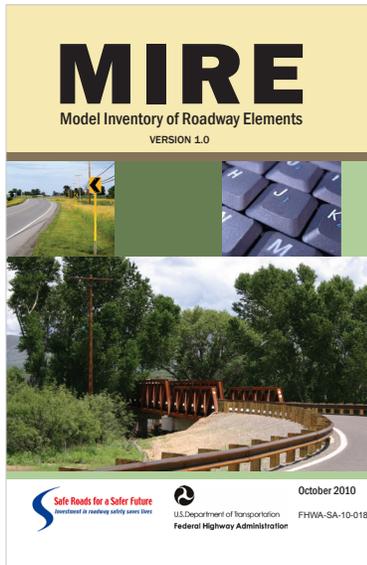
- The Resource Center Safety and Design Team (<http://www.fhwa.dot.gov/resourcecenter/teams/safety/>) is able to provide safety performance management to transportation stakeholders.
- The Resource Center Planning/Freight Team (<http://www.fhwa.dot.gov/resourcecenter/teams/planning/index.cfm>) helps customers in the field of transportation planning, freight and cross cutting transportation performance management topics.

### Resources Related To Data

States and MPOs can use FHWA's Roadway Safety Data Dashboard (<https://rspcb.safety.fhwa.dot.gov/safetycop.aspx>) to access fatality data. The data dashboard is a web-based tool that visualizes and communicates fatality data on U.S. public roadways. Since fatality data can be very complex, the dashboard makes it easy to see trends and make comparisons between States, MPOs and regions. The data dashboard uses data to generate charts and graphs to display the elements that describe the crash, the vehicle, and the people involved.



The Office of Safety houses a Roadway Safety Data Program that provides information and resources that can help agencies improve their roadway safety data for analysis and evaluation purposes. Agencies can access noteworthy practices, case studies, recorded webinars, training and technical assistance through the program at <http://safety.fhwa.dot.gov/rsdp/>.



FHWA provides the MIRE Data Collection Guidebook intended to provide State and local jurisdictions with practical means to collect MIRE data that are not traditionally collected by agencies. Agencies can incorporate the Guidebook's recommendations into their current data collection methods. The guidebook can be found at:

(<http://safety.fhwa.dot.gov/rsdp/downloads/datacollectionguidebook.pdf>)

FHWA provides an information resource, the *Model Inventory of Roadway Elements – MIRE, Version 1.0 Report* ([http://safety.fhwa.dot.gov/tools/data\\_tools/mirereport](http://safety.fhwa.dot.gov/tools/data_tools/mirereport)), which (in Appendix B) maps MIRE elements to the Highway Safety Manual, Interactive Highway Safety Design Model, and AASHTOWare Safety Analyst.

The Office of Safety and the Office of Planning provide a guidebook (<http://safety.fhwa.dot.gov/tsp/fhwasa15089/>) on Applying Safety Data and Analysis to Performance-Based Transportation Planning. This guidebook provides State and regional planners with information on how to effectively use safety data and analysis tools in performance-based transportation planning and programming processes.

The US DOT Traffic Records Coordinating Committee (DOT/TRCC) is a multi-modal group with members from FHWA, FMCSA, NHTSA, and RITA that works to improve the collection, management, and analysis of traffic safety data at the State and Federal level. The committee (<https://www.transportation.gov/trcc>) coordinates with State traffic records professionals and agencies.

NHTSA works to ensure complete, accurate, and timely traffic safety data are collected, analyzed, and made available for decision making through its Traffic Records Team (<http://www.nhtsa.gov/Data/Traffic+Records>). The team helps States improve their traffic safety data collection, management, and analysis capabilities through evaluation, training, and technical assistance. The services they offer include:

- State Traffic Records Assessments: peer evaluations of state traffic records capabilities. A final report reveals traffic records ratings, recommendations, and considerations for improving a State traffic records system.
- Crash Data Improvement Program (CDIP): the quality of a State's crash data is examined. A team provides recommendations to improve the data to support safety decision making.
- Go Teams: provide States with resources and assist with addressing traffic records issues.

## Resources Related To Advanced Analysis Tools and Prediction Tools

The Highway Safety Manual (HSM) provides transportation professionals with knowledge, techniques, and methodologies to quantify the safety-related effects of transportation decisions. The HSM provides the best factual information and tools in a useful form to facilitate roadway decisions based on the explicit consideration of their effects on potential future crash frequency and severity. Safety Analyst is a set of software tools used by State and local highway agencies for highway safety management. Safety Analyst implements state-of-the-art analytical procedures for use in the decision-making process to identify and manage a system-wide program of site-specific improvements to enhance highway safety by cost-effective means. The software automates procedures to assist highway agencies in implementing the six main steps of the highway safety management process, including: network screening, diagnosis, countermeasure selection, economic appraisal, priority ranking, and countermeasure evaluation. Both the HSM and Safety Analyst can be used to select countermeasures for improving system performance. States and MPOs should consider countermeasures as part of their forecasting analysis before establishing targets.

The Resource Center Planning/Freight Technical Services Team provides a range of technical services and training on different analytical tools and methods that can be used throughout planning and project development and for a variety of applications. The Team is piloting a course on Safety Analysis for Freeways and Interchanges that will become a National Highway Institute Course.

FHWA has a Systemic Safety Project Selection tool that involves three basic elements: (1) Selecting locations and countermeasures; (2) Achieving the correct balance between systemic and traditional safety investments; and (3) Evaluating the effectiveness of the systemic approach. FHWA's Systemic Tool training, technical assistance information, and planned and archived webinars are located at <http://safety.fhwa.dot.gov/systemic/training.cfm>.

Crash modification factors (CMFs) are used for infrastructure projects and provide a good indicator for success. The Crash Modification Factors Clearinghouse (<http://www.cmfclearinghouse.org/index.cfm>) houses a Web-based database of CMFs along with supporting documentation to help transportation engineers identify the most appropriate countermeasure for their safety needs.

## Resources Related to Behavioral and Infrastructure Countermeasures

*Countermeasures that Work* (<http://www.ghsa.org/html/publications/countermeasures.html>), a NHTSA document, provides evidence-based projects with effectiveness ratings that may be useful to States looking for education, outreach and enforcement projects by program area.

A NCHRP Report 622 titled, *Effectiveness of Behavioral Highway Safety Countermeasures* ([http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_622.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_622.pdf)), presents findings of a research project to develop a framework and guidance for estimating the costs and benefits of behavioral highway safety countermeasures.

## OPPORTUNITIES

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### Ongoing Projects Related to Highway Safety Countermeasures Include:

- NCHRP 17-46 Comprehensive Analysis Framework for Safety Investment Decisions  
<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=2725>
- NCHRP 17-60 Benefit-Cost Methodology for Behavioral Highway Safety Countermeasures  
<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3182>

The Strategic Highway Safety Plan (SHSP) process assists in the identification of emphasis areas that will yield the greatest reductions in fatalities and serious injuries. The SHSP is the blueprint States use to guide investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries. The SHSP also provides good opportunity to ensure MPOs are engaged in joint discussions related to safety planning, safety performance targets and countermeasures.



### Every Day Counts Technologies

Every Day Counts (EDC) is an initiative of FHWA designed to identify and deploy innovation aimed at reducing the time it takes to deliver highway projects, enhance safety and protect the environment. EDC technologies have application to safety. For more information visit <https://www.fhwa.dot.gov/innovation/everydaycounts/>.

### Additional information on EDC technologies can be found in the following reports:

- Every Day Counts: Significant Impacts Report  
[http://www.fhwa.dot.gov/innovation/everydaycounts/reports/edc-significant\\_impacts.pdf](http://www.fhwa.dot.gov/innovation/everydaycounts/reports/edc-significant_impacts.pdf)
- Every Day Counts: Round 2 Final Report <http://www.fhwa.dot.gov/innovation/everydaycounts/edc-2.cfm>

## EDC 3, Regional Models of Cooperation

The EDC3 Regional Models of Cooperation (RMOC) initiative focuses on fostering enhanced processes for effective coordination and collaboration among State DOTs, MPOs and transit authorities, resulting in improved decision making policy implementation, technology use and performance management. The initiative has applications in a range of areas, including: congestion management, safety, freight, severe weather etc. Coordination includes jointly developing agency's transportation plans and programs, corridor studies, and project planning across MPO and State boundaries. It also includes collaboration on activities such as: data collection, data storage and analysis, and analytical tools. A RMOC safety planning national webinar was held in December 2015. The recording for this webinar is available at: [http://www.fhwa.dot.gov/planning/regional\\_models/webinars/](http://www.fhwa.dot.gov/planning/regional_models/webinars/).

For more information on Safety Performance Resources and Support, please contact **Dana Gigliotti, FHWA Transportation Specialist** at [dana.gigliotti@dot.gov](mailto:dana.gigliotti@dot.gov) or at 202-366-1290 or your FHWA Division Office. A list of Division Offices is available at <http://www.fhwa.dot.gov/about/field.cfm>.